

WHAT IS CLAIMED IS:

1. A method for the insertion of information to synchronize a destination node with a data stream transmitted from an entry terminal in a heterogeneous network, the heterogeneous network including at least one sub-network conveying first packets and one basic network conveying second packets, the entry terminal being connected to the sub-network, the sub-network being connected to the basic network by means of an entry node forming the second packets from at least one sub-part of at least one first packet,

wherein, at the occurrence of at least one pre-determined event, the entry node:

- forms a second synchronization packet such that the beginning of the useful information of the second synchronization packet corresponds to the beginning of a first packet;
- inserts a synchronization marker in the second synchronization packet; and
- modifies the size of a second packet preceding the second synchronization packets.

2. A method according to claim 1, wherein said predetermined event is reached at a predetermined instant from among a plurality of predetermined instants.

3. A method according to claim 2, wherein the plurality of predetermined instants succeed one another in a cycle with a fixed period.

4. A method according to claim 1, wherein said predetermined event is the reception, by the entry node, of a synchronization request.

5. A method according to claim 4, wherein the synchronization request is sent out by a node belonging to the group comprising:

- a first destination node, to which there is connected a first destination terminal that has formulated a first request for connection with the entry terminal, to receive said data stream;
- a second destination node, to which there is connected a second destination terminal that has formulated a second request for connection with the entry terminal, to receive said data stream, after a

connection has already been set up between the first destination terminal and the entry terminal for said data stream.

5 6. A method according to claim 1, wherein the entry node modifies the size of the second synchronization packet, in such a way that the sum of the modified size of the preceding second packet and the modified size of the second synchronization packet is substantially equal to the normal size of a second packet.

10 7. A method according to claim 1, wherein the entry node manages a mechanism for the obtaining, after each occurrence of a predetermined event, of the current distance, in memory, between a memorized position of a forthcoming start of a first packet and a current position of a read pointer used for the building of the second packets.

8. A method according to claim 7, wherein the entry node performs the following steps:

- the entry node obtains said current distance;
- if the current distance is equal to zero, the entry node generates and sends a second synchronization packet for which the start of the payload data corresponds to the start of a first packet, this second synchronization packet comprising a synchronization marker;
- if the current distance is smaller than the normal size of a second packet, the entry node generates and sends a truncated second packet, called a preceding second packet, whose reduced size is equal to the current distance, then generates and sends a second synchronization packet for which the start of the payload data corresponds to the start of a first packet, this second synchronization packet comprising a synchronization marker;
- if the current distance is greater than or equal to the normal size of a second packet, the entry node sends a second normal-sized packet that is not a second synchronization packet.

20 9. A method for the processing of information for the synchronizing of a destination node with a data stream transmitted from an entry terminal in a heterogeneous network, the heterogeneous network including at least one sub-network conveying first packets and a basic network conveying second packets, the sub-network being connected to the basic network by means of a destination node,

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wherein the destination node:

- detects a second synchronization packet among the second packets conveyed by the basic network by means of a synchronization marker contained in the second synchronization packet;
- 5 - forms a first synchronization packet from at least one second synchronization packet, such that the beginning of the first synchronization packet corresponds to the beginning of the useful information of the second synchronization packet; and
- transfers the first synchronization packet to the sub-network.

10 **10.** A method according to claim 9 wherein, following the transfer of the first synchronization packet, the destination node:

- forms first packets out of second packets associated with the data stream;
- transfers the first packets formed on the sub-network.

15 **11.** A method according to any of the claim 9 wherein so long as it has not detected a second synchronization packet, the destination node swallows the second received packets, without forming first packets.

20 **12.** A node in a heterogeneous network, the heterogeneous network including at least one sub-network conveying first packets and a basic network conveying second packets, the node comprising:

- forming means for forming a second synchronization packet such that the start of the payload data of the second synchronization packet corresponds to the start of a first packet;
- 25 - inserting means for inserting a synchronization marker in the second synchronization packet; and
- modification means for modifying the size of a second packet preceding the second synchronization packet.

30 **13.** A node according to claim 12, wherein said forming means form the second synchronization packet at a occurrence of a predetermined event, said predetermined event being reached at a predetermined instant from among a plurality of predetermined instants.

14. A node according to claim 13, wherein the plurality of predetermined instants succeed one another in a cycle with a fixed period.

5 15. A node according to claim 12, wherein said forming means form the second synchronization packet at a occurrence of a predetermined event, said predetermined event being the reception, by the entry node, of a synchronization request.

16. A node according to claim 15, wherein the synchronization request is sent out by a node belonging to the group comprising:

- a first destination node, to which there is connected a first destination terminal that has formulated a first request for connection with the entry terminal, to receive said data stream;
- 10 - a second destination node, to which there is connected a second destination terminal that has formulated a second request for connection with the entry terminal, to receive said data stream, after a connection has already been set up between the first destination
- 15 terminal and the entry terminal for said data stream.

17. A node according to claim 12, wherein said modification means modify a size of the second synchronization packet, in such a way that the sum of the modified size of the preceding second packet and the modified size of the second synchronization packet is substantially equal to the normal size of a second packet.

20 18. A node according to claim 12, further comprising means for obtaining a current distance in memory between a memorized position of a forthcoming start of a first packet and a current position of a read pointer used for the building of the second packets.

25 19. A node according to claim 18, further comprising means for selective activation as a function of the value of the current distance obtained, such that :

- if the current distance is equal to zero, the activation means activate means for generating and sending a second synchronization packet for which the start of the payload data corresponds to the start of a first packet, this second synchronization packet comprising a
- 30 synchronization marker;

- if the current distance is smaller than the normal size of a second packet, the activation means activate means for generating and sending a second truncated packet, called a preceding second packet, whose reduced size is equal to the current distance, then means for generating and sending a second synchronization packet for which the start corresponds to the start of a first packet, this second synchronization packet comprising a synchronization marker;
- if the current distance is greater than or equal to the normal size of a second packet, the activation means activate means for sending a second normal-sized packet that is not a second synchronization packet.

20. A node in a heterogeneous network, the heterogeneous network including at least one sub-network conveying first packets and one basic network conveying second packets, the node comprising:

- detecting means for detecting a second synchronization packet among the second packets conveyed by the basic network by a synchronization marker contained in the second synchronization packet;
- forming means for forming a first synchronization packet from at least one second synchronization packet, such that the beginning of the first synchronization packet corresponds to the beginning of the useful information of the second synchronization packet; and
- transmitter for transmitting the first synchronization packet to the sub-network.

21. A node according to claim 20, wherein said forming means form first packets out of second packets associated with the data stream following the transmission of the first synchronization packet, and wherein said transmitter transmits the first packets formed on the sub-network.

22. A node according to claim 20, further comprising means for swallowing the second received packets, without forming first packets so long as it has not detected a second synchronization packet.